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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,266	06/06/2001	Steven Kenneth Frendle	ORS0011-DIV.	7026

7590 10/09/2003
BRETT C. MARTIN
1650 TYSONS BOULEVARD
MCLEAN, VA 22102

EXAMINER

HAWKINS, CHERYL N

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,266

Applicant(s)

FRENDLE ET AL.

Examiner

Cheryl N Hawkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-80 is/are pending in the application.
- 4a) Of the above claim(s) 64-77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-50, 62 and 78-80 is/are rejected.
- 7) ☒ Claim(s) 51-61 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group 1 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the subject matter of Claims 41-80 is sufficiently related that a thorough and complete search for the subject matter of the elected claims would necessarily encompass a thorough and complete search for the subject matter of the non-elected claims. This is not found persuasive because while the searches may be related, they are not coextensive. The Examiner maintains that Groups II, III, and I are distinct inventions and the restriction requirement set forth in the previous office action is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102 and 35 USC § 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 41 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Faasse, Jr. (US 4,664,736). Faasse, Jr. discloses a method for shaping web materials (Figure 10) including the steps of feeding a web material (imperforate foil material 4) between a rotary die (roller cutting die 30) and an anvil roller (applicator drum 32), in which the rotary die and the anvil roller are rotating in opposite directions; cutting the web material with the rotary die into a web product (dam patches 9) and a web flash (offal portion 34); conveying the web product away from the anvil roller (column 5, lines 12-14); and removing the web flash (offset foil roller 58, idler roller 59, offal take-up reel 60; column 8, lines 3-13). It is noted that the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash.

As to Claim 50, Faasse, Jr. discloses a method in which the anvil roller is configured to produce a through-cut (Figure 10, applicator drum 32).

5. Claims 41 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faasse, Jr. (US 4,664,736) in view of Trilli (US 4,273,606). Faasse, Jr. discloses a method for shaping web materials (Figure 10) including the steps of feeding a web material (imperforate foil material 4) between a rotary die (roller cutting die 30) and an anvil roller (applicator drum 32), in which the rotary die and the anvil roller are rotating in opposite directions; cutting the web material with the rotary die into a web product (dam patches 9) and a web flash (offal portion 34); conveying the web product away from the anvil roller (column 5, lines 12-14); and removing the web flash (offset foil roller 58, idler roller 59, offal take-up reel 60; column 8, lines 3-13).

As noted above, the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash. In any event, it is well known and conventional in the web cutting art, as disclosed by Trilli (column 1, lines 34-28), to recycle web flash material. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Faasse, Jr. to include recycling the web flash to provide an environmentally conscious production method as well to decrease the costs of obtaining raw materials by allowing the waste to be reused.

As to Claim 50, Faasse, Jr. discloses a method in which the anvil roller is configured to produce a through-cut (Figure 10, applicator drum 32).

6. Claims 41 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Meulenberg (US 4,333,781). Meulenberg discloses a method for shaping web materials (Figure 1) including the steps of feeding a web material (decals 14 and backing material 16) between a rotary die (rotary cutting die 28) and an anvil roller (vacuum wheel 24), in which the rotary die and the anvil roller are rotating in opposite directions; cutting the web material with the rotary die into a web product (decals 18) and a web flash (decals 48); conveying the web product away from the anvil roller (column 4, line 66 through column 5, line 1); and removing the web flash (column 4, lines 57-62). It is noted that the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash.

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As to Claim 50, Meulenberg discloses a method in which the anvil roller is configured to produce a through-cut (Figure 1, vacuum wheel 24).

7. Claims 41 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meulenberg (US 4,333,781) in view of Trilli (US 4,273,06). Meulenberg discloses a method for shaping web materials (Figure 1) including the steps of feeding a web material (decal material 14 and backing material 16) between a rotary die (rotary cutting die 28) and an anvil roller (vacuum wheel 24), in which the rotary die and the anvil roller are rotating in opposite directions; cutting the web material with the rotary die into a web product (decals 18) and a web flash (decal material weed 48); conveying the web product away from the anvil roller (column 4, line 66 through column 5, line 1); and removing the web flash (column 4, lines 57-62).

As noted above, the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash. In any event, it is well known and conventional in the web cutting art, as disclosed by Trilli (column 1, lines 34-28), to recycle web flash material. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Meulenberg to include recycling the web flash to provide an environmentally conscious production method as well to decrease the costs of obtaining raw materials by allowing the waste to be reused.

As to Claim 50, Meulenberg discloses a method in which the anvil roller is configured to produce a through-cut (Figure 1, vacuum wheel 24).

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8. Claims 41, 46, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Stahl (US 4,405,401). Stahl discloses a method for shaping web materials (Figure 1) including the steps of feeding a web material (feed strip 14) between a rotary die (rotary die 18) and an anvil roller (platen 26), in which the rotary die and the anvil roller are rotating in opposite directions; cutting the web material with the rotary die into a web product (labels 10, release backing 12) and a web flash (waste film 32); conveying the web product away from the anvil roller (labeling wind roll 34; and removing the web flash (waste film wind roll 30). It is noted that the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash.

As to Claim 46, Stahl discloses a method in which the web material includes more than one layer (column 2, lines 15-24) and the anvil roller (Figure 1, platen 26) is configured to produce a kiss-cut, in which the rotary die cuts only one layer of the web material (Figure 3; column 3, lines 8-13).

As to Claim 47, Stahl discloses a method (Figure 1) in which the web material (feed strip 14) includes a product layer (labels 10) and a liner (release backing 12), and in which the rotary die (rotary die 18) cuts only the product layer into the web product and the web flash (Figure 3; column 3, lines 8-13).

9. Claims 41, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401) in view of Trilli (US 4,273,606). Stahl discloses a method for shaping web materials (Figure 1) including the steps of feeding a web material (feed strip 14) between a rotary die (rotary die 18) and an anvil roller (platen 26), in which the rotary die and the anvil roller are

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rotating in opposite directions; cutting the web material with the rotary die into a web product (labels 10, release backing 12) and a web flash (waste film 32); conveying the web product away from the anvil roller (labeling wind roll 34; and removing the web flash (waste film wind roll 30).

As noted above, the claim limitation which states that the web flash is removed "for recycling" is considered as an intended use, because it does not positively recite a step for recycling the web flash. In any event, it is well known and conventional in the web cutting art, as disclosed by Trilli (column 1, lines 34-28), to recycle web flash material. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Stahl to include recycling the web flash to provide an environmentally conscious production method as well to decrease the costs of obtaining raw materials by allowing the waste to be reused.

As to Claim 46, Stahl discloses a method in which the web material includes more than one layer (column 2, lines 15-24) and the anvil roller (Figure 1, platen 26) is configured to produce a kiss-cut, in which the rotary die cuts only one layer of the web material (Figure 3; column 3, lines 8-13).

As to Claim 47, Stahl discloses a method (Figure 1) in which the web material (feed strip 14) includes a product layer (labels 10) and a liner (release backing 12), and in which the rotary die (rotary die 18) cuts only the product layer into the web product and the web flash (Figure 3; column 3, lines 8-13).

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10. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faasse, Jr. (US 4,664,736) or Meulenberg (US 4,333,781), or alternatively over Faasse, Jr. (US 4,664,736) in view of Trilli (US 4,273,606) or Meulenberg (US 4,333,781), as applied to claim 41 above, and further in view of Niedermeyer (US 5,795,433) and Pohjola (US 5,224,405). Faasse, Jr. and Meulenberg do not disclose a method which includes conveying web material, web product, or web flash on a vacuum belt. It is well known and conventional in the sheet material conveying art, as disclosed by Niedermeyer (Figure 19, vacuum belt 86) and Pohjola (Figure 1, conveyor belt 164), to utilize a vacuum belt to transport sheet materials while being held in a predetermined position. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of either Faasse, Jr. or Meulenberg to include conveying the web material, web product, or web flash on a conventional vacuum belt as suggested by Niedermeyer and Pohjola to transport the webs while maintaining them in a position required for the next step of the process.

11. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meulenberg (US 4,333,781), or alternatively over Meulenberg (US 4,333,781) in view of Trilli (US 4,273,606), as applied to claim 41 above, and further in view of Jones (US 4,978,415). Meulenberg does not disclose a method which includes applying lubricant to the rotary die to ease removal of the web flash from the rotary die. Jones discloses a method for shaping web materials which includes applying lubricant to a rotary die to keep the rotary die free of adhesive residue (column 2, lines 43-59; column 9, lines 30-35; column 10, lines 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Meulenberg to

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include applying lubricant to the rotary die as suggested by Jones to keep the rotary die free of adhesive residue thereby enabling longer uninterrupted operation of the rotary die and easing the removal of the web flash from the rotary die.

12. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 47 above, and further in view of Grard et al. (US 4,245,689). Stahl discloses a method in which the product layer includes an adhesive layer and the liner includes paper (column 2, lines 15-21). Stahl is silent as to the product layer includes a mastic. It is well known and conventional in the adhesive bonding art, as disclosed by Grard et al. (column 3, lines 52-54), to use a mastic to adhesively bonding laminated articles. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Stahl to include a conventional mastic as the adhesive component of the product layer as suggested by Grard et al. to provide an adhesive bond between the product layer and the liner.

13. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 47 above, and further in view of Hong et al. (US 4,816,101). The references as combined do not disclose a method in which the product layer includes rubber butyl based mastic and the liner includes rubber butyl web. Hong et al. disclose the production of sealant strip (Figure 1) which includes a rubber butyl based mastic (first strip 20) and a liner (second strip 30) which includes a rubber butyl web (column 3, line 52 through column 4, line 46). Hong

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et al. further discloses that the sealant strip is detachified to permit cutting of the sealant strip to predetermined lengths (column 6, lines 50-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Stahl to cut the sealant strip disclosed by Hong et al. into predetermined lengths as desired for the subsequent construction of self-sealing pneumatic tires.

14. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 41 above, and further in view of Freres (US 3,921,428) and Mizushima (US 4,188,815). Stahl does not disclose a method in which a first rotary die and anvil roller module is mounted on a first lifting mechanism and a second rotary die and anvil roller module is mounted on a second lifting mechanism. It is well known and conventional in the die cutting art, as disclosed by Freres (column 6, lines 45-51), to employ different rotary dies and anvil rollers in a single cutting apparatus to provide web materials cut into a variety of shapes and sizes. Mizushima discloses an apparatus which includes two lifting mechanisms (Figure 3, die lifter mechanism 39) for switching interchangeable dies from a storage location to an operative position and vice versa (column 3, line 63 through column 4, line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Stahl to include a plurality of interchangeable rotary die and anvil roller modules as suggested by Freres to provide the web material with different shapes or sizes and to utilize lifting mechanisms such as those suggested by Mizushima to provide an easy method for quickly switching from one cutting module to another.

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15. Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 41 above, and further in view of Grard et al. (US 4,245,689). Stahl discloses a method in which the product layer includes an adhesive layer and a film liner (column 2, lines 15-21). Stahl is silent as to the product layer includes a mastic. It is well known and conventional in the adhesive bonding art, as disclosed by Grard et al. (column 3, lines 52-54), to use a mastic to adhesively bonding laminated articles. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Stahl to include a conventional mastic as the adhesive component of the product layer as suggested by Grard et al. to provide an adhesive bond between the product layer and the liner.

16. Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 41 above, and further in view of Dollinger (US 5,151,309). Stahl does not disclose a method in which the web material includes polyester. It is well known and conventional in the labeling art, as disclosed by Dollinger (column 9, lines 39-44), to provide a release liner for labels from a variety of materials including polyester. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the release liner of Stahl to be fabricated from polyester as suggested by Dollinger; polyester being a material conventionally used for fabricating label release liners and functionally equivalent to paper for that use.

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17. Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl (US 4,405,401), or alternatively over Stahl (US 4,405,401) in view of Trilli (US 4,273,606), as applied to claim 41 above, and further in view of Hong et al. (US 4,816,101). The references as combined do not disclose a method in which the product layer includes rubber butyl based mastic and the liner includes rubber butyl web. Hong et al. disclose the production of sealant strip (Figure 1) which includes a rubber butyl based mastic (first strip 20) and a liner (second strip 30) which includes a rubber butyl web (column 3, line 52 through column 4, line 46). Hong et al. further discloses that the sealant strip is detackified to permit cutting of the sealant strip to predetermined lengths (column 6, lines 50-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Stahl to cut the sealant strip disclosed by Hong et al. into predetermined lengths as desired for the subsequent construction of self-sealing pneumatic tires.

Allowable Subject Matter

18. Claims 51-61 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter: As to Claim 51, the prior art of record does not disclose or provide any motivation for a method which includes the steps of adhering the web product to the rotary die instead of the first anvil

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roller; rotating the web product around the rotary die to a position where a second anvil roller contacts the rotary die such that a primary web material enters between the second anvil roller and the rotary die; cutting the primary web material with the rotary die to form a primary web product and a primary web flash; and attaching the web product to the primary web product to form a final product.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl N. Hawkins whose telephone number is (703) 306-0941. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

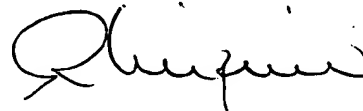
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where the application or proceeding is assigned is (703) 872-9310 for regular communications or (703) 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

Cheryl N. Hawkins

Cheryl N. Hawkins 9/30/03

September 30, 2003



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700